

INTEGRATING CLIMATE CHANGE ADAPTATION INTO DIOURBEL'S URBAN DEVELOPMENT PLANNING

SOME METHODOLOGICAL APPROACHES

CLACC SIDE EVENT, 5th DECEMBER 2008 – POZNAN

MOUSSA NA ABOU Mamouda, ENDA TM



CONTEXT OF DIOURBEL CITY

- ❑ **Inland city,**
- ❑ **150 km far away from Dakar,**
- ❑ **Population: 76 548 inhbts in 1988, 95 984 inhbts in 2002 and 100 445 inhbts in 2007**
- ❑ **Annual mean urbanization rate: 45,1% (proximity with Dakar)**
- ❑ **DIOURBEL's Urban Development Plan is 30 years old**



VULNERABILITIES IN DIOURBEL

FACTORS SHAPING SOCIO ECONOMIC VULNERABILITY

Poverty, Bad governance, Natural resource-based society,
Rain fed agriculture, Land use competition between
agriculture and urbanization

Lack of basic infrastructures, Lack of financial resources
Irregular habitat,

Emigration of work force,

Diourbel has no forests, no coasts, no touristic areas,

Unsustainable waste management





23 5 2008

FACTORS SHAPING BIOPHYSICAL VULNERABILITY (Impact-led)

Strong rainfall variability, Decrease in rainfall levels,

Decrease in water tables (16 cm/year), Well drillings
could reach 200 to 300 m,

Salinization of ground water

Crossed by a river which stopped flowing since 1970





PEOPLE'S « ADAPTATION »

SOLIDARITY

MONEY GENERATING ACTIVITIES

IRRIGATION

HELP FROM GOVERNMENT

MIGRATION



OUR KEY RECOMMENDATIONS TO DECISION MAKERS

- INTEGRATED WATER RESOURCE MANAGEMENT
- UPDATE OF URBAN DEVELOPMENT PLAN
- MORE SUPPORTS FOR NON RAINFED AGRICULTURE
- ECONOMIC DIVERSIFICATION



MAINSTREAMING CC ADAPTATION INTO THE NEW URBAN PLAN FOR DIOURBEL

CLIMATE-PROOF DEVELOPMENT APPROACH

VULNERABILITY (differentiation) APPROACH

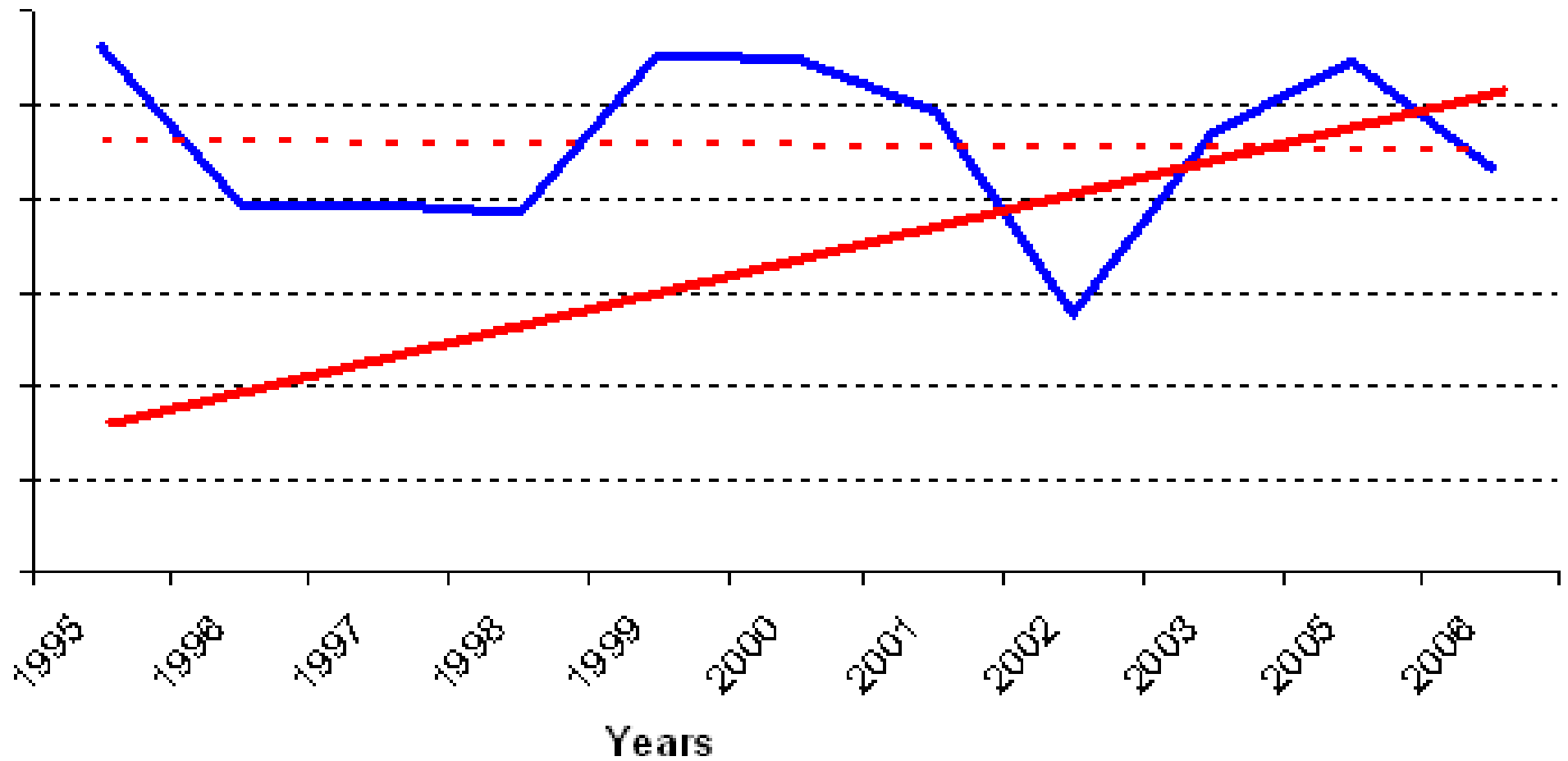


1- CLIMATE-PROOFING DEVELOPMENT APPROACH

URBAN PLAN (five, ten years) VS CLIMATE

DOWNSCALED GCMs (GLOBAL CIRCULATION MODELS)





- City's water demande
- Rainfall at city level

CLIMATE TRENDS VS DEVELOPMENT PLANNING



2- The Vulnerability (differentiation) Approach

- ❑ Adaptation is an answer to Vulnerability :
avoiding mal-adaptation**
- ❑ Ensure that ODA is not diverted by CC
Adaptation and vice-versa**



The Vulnerability (differentiation) Approach

ASSUMING THAT:

**Dealing with city's biophysical vulnerability refers to
ADAPTATION**

**Dealing with socio economic vulnerability at city level
refers to DEVELOPMENT AS USUAL**

**Mainstreaming CC Adaptation together with
Development**



THANK YOU





Programme

« Energie, Environnement, Développement »

54, rue Carnot, BP 3370 - Dakar, Sénégal

Tél. (221) 33 822 24 96 / 33 822 59 83

Fax (221) 33 821 75 95

Email : enda.energy@orange.sn

Website : <http://energie.enda.sn>

News : <http://www.endaenergy.sn>

